Quality Management Office

FY11 Business Plan



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General

This Business Plan covers the FY11 scope of work for the Quality Management Office (QMO), including supporting the:

- SC Laboratory Plan;
- Blueprint Project;
- Annual Laboratory Plan (ALP); and
- Performance Evaluation and Measurement Plan.

1. Strategic Issues

The QMO takes primary responsibility for the following strategic initiatives described further in the ALP and/or Blueprint Project:

- Implement the Human Performance Improvement Initiative;
- Institutionalize the Competitiveness Initiative;
- Improve Management System (MS) Steward accountability in monitoring/assessing and improving key functions and processes integral to the Contractor Assurance System (CAS);
- Implement corrective actions for the Integrated Assessment Program (IAP);
 - Demonstrate a strengthened independent assessment function through more effective integration of Quality Assurance, Internal Audit, Internal Oversight, and Integrated Assessments in support of a successful contractor assurance program {PEMP Notable Outcome};
- Improve Corrective and Preventive Action Management with strengthened Quality Management Representative (QMR) and Event/Issues analysis capabilities and reporting;
- Develop processes for institutional and organizational performance roll-up, analysis and reporting;
- Deliver training on tracking and trending leading and lagging indicators;
 - Evaluate low level ESH events and issues to identify trends and disseminate Lessons Learned {PEMP Notable Outcome};
- Make significant progress in defining and implementing a CAS; Have a successful CAS Peer Review; Develop improvement actions in response to the CAS Peer Review;
- Support the Institutional Risk Management Committee.

2. Organizational Fiscal Year Targets

The QMO supports Brookhaven National Laboratory's primary mission in Advancing the Frontiers of Science and Technology, as well as Operational Excellence, to develop and sustain world-class research and development programs (R&D) that serve the needs of the nation.

The QMO has four strategic goals, which are aligned with the Laboratory's strategic focus areas and goals:

• Goal 1.0 - Provide quality tools and processes for continuous improvement of systems and programs.

The FY11 Objectives are:

- o 1.1 Coordinate the Human Performance Improvement initiative;
- 1.2 Institutionalize Business Process Improvement (Competitiveness Improvement Project);
- o 1.3 Increase Institutional Process Improvement Capability (Six Sigma);
- 0 1.4 Manage the SBMS Improvement Project to improve implementation of the system;
- o 1.5 Provide Quality Assurance support to Laboratory organizations, as needed or requested;
 - Support the development of an NSLS-II Project Integrated Commissioning Plan that contains a resource loaded schedule of all support services needed to ensure successful commissioning
 - Support the development of the Radiological Control Division (RCD) Quality Assurance Plan.
- Goal 2.0: Provide a comprehensive and rigorous assurance system to ensure compliance with applicable requirements, pursue excellence through continuous improvement, provide for timely identification and correction of deficient conditions, and verify the effectiveness of completed corrective actions.

The FY11 Objectives are:

- 2.1 Improve MS Steward accountability in monitoring/assessing and improving key functions and processes integral to the CAS; Implement corrective actions for the IAP;
- 2.2 Improve Corrective and Preventive Action Management with strengthened QMR and Event/Issues analysis capabilities and reporting;
 - 2.2.1 Improve Effectiveness of Corrective and Protective Actions (CAPAs)
- 2.3 Develop processes for institutional and organizational performance roll-up, analysis and reporting; Deliver training on tracking and trending leading and lagging indicators;
 - 2.3.1 Develop integrated system for operational data mining, monitoring, trending, analysis, reporting and learning
 - 2.3.2. Increase effectiveness of management systems and reduce Institutional Risk
- 2.4 Have a successful CAS Peer Review; Develop improvement actions in response to the CAS Peer Review;
- o 2.5 Improve Organizational Learning (Lessons Learned).
- Goal 3.0: Provide the primary stewardship responsibilities for the following management systems/programs:
 - o Integrated Assessment Program Management System
 - Integrated Planning Management System

- Quality Assurance Management System
- Standards-Based Management System
- o BNL Lessons Learned Program
- Occurrence Reporting and Processing System
- Quality Assurance Program
- o Suspect/Counterfeit Items Program.

The FY11 Objectives are:

- o 3.1 Deliver functions, processes, and products commensurate with responsibilities.
- **Goal 4.0**: Continue development of QMO Personnel to ensure appropriate experience, knowledge, skills, and abilities commensurate with their responsibilities.

The FY11 Objectives are:

- o 4.1 Revise R2A2s to ensure compatibility with the new Institutional Values;
- o 4.2 Provide continuing training and qualification, and professional development; and
- 4.3 Supplement individual experience and provide a means to maintain awareness of changes and advances in the various fields of expertise.

These goals are key to driving improvement in BNL's overall performance in the context of an environment where there is an expectation that the cost of doing business be reduced.

3. Budget

	FY10 cost plus esc. (\$K)	FY10 indirect FTE	FY11 request (\$K)	FY11 indirect FTE
Quality	2,587.6	16.1	2,581.9	16.67

Function	FTE	Cost (\$K)	Functions
QMO Management	2.0	213.3	Organizational Leadership/Management and Administration, Battelle CoPs
Purchased Services	2.0	181.0	IT Support – SBMS, Requirements, Policy & Strategic Planning (PSP), ES&H
Quality Assurance	3.07	534.5	Quality Engineering; Support of 32 Q reps; Suspect/counterfeit Parts; Maintenance of QA program 10CFR 830.120; NQA I activities
Operational Analysis & Reporting	2.3	300.0	ORPS, ATS, PSP support; Institutional Planning and Reporting , BSA Risk Committees and BHSO/DOE
SBMS	3.8	452.5	Content maintenance & delivery of the institutional requirements set (approx 601 requirements inclusive of DOE directives, NYS, Federal & local)
Requirements Mgmt	1.0	109.5	Review & Management of proposed BSA contract requirements; RODs
Management Projects Support	2.5	341.5	CIP Project Mgr, HPI Project Manager, CAS Review Project Manager, etc.
Other Operating Costs	-	449.6	Space, Utilities, Fuel, DM, Communications, Recharge Services, Purchased Services and Supplies ,Travel

FY 10 - FY 11 Changes - Full year effect of staff replacements

Brockhaven Science Associates

Organizational Performance

In FY10, the Quality Management Office (QMO) met all of its goals for the institution.

In FY10, the need for better analysis of assessment and performance information, increased line support and technical assistance in quality assurance, and the DOE's increased expectations regarding Events/Issues Management (including corrective action management) across the Laboratory were recognized. In response, the Operations Performance Analysis & Reporting group was established within the QMO and staff was added to support this effort. This group is working with Laboratory management to understand data streams, management's information needs, and to meet Blueprint milestones. For FY11, deployment of quality professionals was adjusted to accommodate changes in programmatic needs at the line.

The Quality Assurance Program (QAP) consists of ten criteria. Those criteria that have been the focus of attention over the past year and continue to warrant attention into FY11 are as follows:

- Quality Improvement: QMO's Operations Performance Analysis & Reporting group is building the Laboratory's ability to understand performance data and make improvements in a proactive manner.
- Work Processes and Design: Per the Blueprint, the Integrated Facility Management (IFM) model was implemented at the start of FY11. One goal of IFM is to address weaknesses in design and configuration management processes that were identified in events of FY08 and FY09.
- Inspection & Acceptance Testing: Implementation of the revised approach to the Laboratory's Calibration Program has begun. An assessment of the Calibration Program will be conducted to understand the level and quality of implementation across the laboratory.
- Assessment: Improvements have been made in the Integrated Assessment and Integrated Planning MSs as a result of the refinement of BNL's CAS in late FY10 –early FY11. The IAP MS and subject areas need review and possible revision to ensure they reflect the CAS.

The Laboratory's quality improvement process has been enhanced by defining a clearer risk-based approach to Issues Management. The revised process has been documented. In FY11 implementation and adjustment will continue. The Risk Priority Model implementation must be exercised. Feedback for improvement will be sought and the current model refined to reflect the feedback received.

Planned improvements to the IAP (see the IAP MS) in FY11 will strengthen the Independent and Management Assessment elements of the QAP.

Human Performance Improvement (HPI) efforts, coordinated by the QMO, continue to progress, albeit in a more directed manner. In FY10 coordination of the HPI efforts was transitioned to the Human Factors Scientist. The focus was on integrating principles and tools into work planning and control, procedure writing, and developing an approach for engaging research and scientific staff in understanding how HPI can be of value in their work. Early in FY11, a workshop will be held with Laboratory management to assess where HPI stands and what is needed to continue the maturation of HPI integration at BNL.

The Standards-Based Management System (SBMS) instituted several improvements and changes in FY10 and there has been continued progress on the SBMS Improvement Project. With the establishment of the new Senior Support Manager's Group and the Senior Science and Technology Manager's Group, the SBMS System Champions and the SBMS Oversight and Advisory Committee were eliminated.

As a result of customer feedback and the ongoing SBMS Improvement Project, efforts and enhancements are in place to aid in making the system more user friendly, be more proactive in supporting Laboratory staff, and ensure that the system is reaching the right set of customers. The following are FY10 projects and activities:

Enhanced User Tracking Capabilities:

In late FY09, SBMS switched to Google Analytics software, which provides custom tracking routines and captures data on individual and organizational usage. Analysis of this data is used to evaluate organizational system usage and identify potential low level users who may need additional support.

Search Centric Tool

A project was completed to make SBMS more search-centric. Steps were taken to make the search feature more central and powerful. Organic Google search results are integrated with keyword-based search results and are provided in one clean interface. A search suggestion engine has been developed that "guesses" what a user is searching for and offers suggestions as the user types.

Key Workflows:

A new system has been developed as a front end to SBMS for delivering cross-management system workflows to the Laboratory population. The system is flexible enough to map sections within a subject area, an entire subject area, or a business process that cuts across multiple management systems. Leading a core team, an initial process workflow for "Procuring Chemicals for Research" is being mapped and will be used to guide staff, through the process. This is being explored as an aid to make SBMS more user-friendly and support the Competitiveness Improvement processes.

Support the Competitiveness Improvement Project (CIP)

As processes are improved, these changes will be reflected in SBMS documents. Outputs from the CIP teams could also serve as inputs to the key workflows.

Subscribers Report:

In order to make sure the system is reaching the right set of customers, an electronic report tool was created that shows who subscribes to document updates. In collaboration with the RCD and Security Division, a pilot program has been tested for the new tool. The tool allows users to run reports by department, by management system, by document, and by individual employee. Based on the pilot feedback, it can be filtered to include only supervisors and managers within selected organizations. This functionality could be useful for Department Chairs/Division Managers to ensure that their lead employees remain informed of important changes to requirements as they affect operations.

FUA Template Project:

Working closely with the Manager of the Building Manager Program, a database-driven system was developed with two templates for FUAs—one for buildings owned by the Collider-Accelerator Department (C-AD) and another for all other buildings. The new system enables global changes to be made to multiple

FUAs simultaneously. This enables organizational titles, document titles, and hyperlinks to be updated much more efficiently. This supports the restructuring of the Facilities & Operations Directorate and implementation of the IFM model, and strengthens the Integrated Safety Management (ISM) Program. These new templates were recently utilized to effectively meet a strict deadline of October 1st for completion of the IFM changes.

Support Blueprint Integrated Facility Management (IFM) Procedures Team:

In conjunction with the IFM Procedures Team, a new Blue Sheet process was used to handle the high volume of Blueprint-driven revisions under strict time constraints. Each Blue Sheet captured the changes for all documents associated with one particular management system and included all required approval signatures. The use of Blue Sheets streamlined the revision and publication process for this unique situation of high volume revisions and limited time.

Blueprint Project Support:

Support will be provided to manage Blueprint-driven changes across the Laboratory. The Blueprint projects fit into five broad categories: organizational changes; leadership effectiveness; construction and facility management; safety and operations excellence; and performance management. Therefore, as the Blueprint advances, numerous documents will need to be revised to ensure that the most updated and accurate information is provided to the Laboratory community.

SBMS Content Development:

In FY10, SBMS incorporated additional control gates to provide better awareness and monitoring of expiring periodic review dates of documents, and provided ongoing support and expertise to update and maintain institutional-level documents. As a result, the level of SBMS documents with expired periodic review dates has been dramatically reduced. SBMS continues to support all requirements to revise and publish updates to documents. The team also provides ongoing maintenance of the SBMS home page and web site.

Coordinate/Conduct Annual Operations Management System Description Reviews for DDO:

As an annual requirement, monitor and track the annual review of all Operations Management System Descriptions. This was completed by 08/01/10, the required due date. This annual review will take place again in FY11.

Editorial Standards Document

A set of BNL editorial standards has been developed to be used for the writing, design, and revision of all SBMS documents. The new editorial standards document supplements a pre-existing guide for the development of subject areas to provide uniformity in style and formatting across the system.

Expanding SBMS Staff Integration

The scope of the SBMS office has been expanded to support a more robust Laboratory control process. Staff have been integrated into the Occurrence Reporting and Processing System (ORPS) and Lessons Learned reporting process and served as members on accident investigations teams to ensure that corrective actions are accurately reflected in the appropriate documents.

Staff Training and Self Improvement

Members of the SBMS staff have completed Motorola's Lean Six Sigma Green Belt Certification Program and Business Process Management training provided by the Inteq Group.

Battelle Process Modeling Initiative (BPMI) Workshop Support

SBMS coordinated BNL participation in the Open Source Software (OSS) workshop held in May 2010. The workshop team has begun forming an OSS Working group.

Requirements Management (RM):

The following Requirements Management (RM) enhancements were completed in FY10 to provide better tracking and establish a more refined set of standard RM metrics:

- Date-time tagging of Record of Decision (ROD) fields was added for data analysis, and multiple fields were tagged/indexed to enable data collection and reporting;
- A revision status date was added to the ROD Status Report
- Added new sort by MS Steward
- Complete ROD History Report

Support to DOE HSS on Technical Standards:

BNL continues to participate in enhancing access to Industry/Technical Codes and Standards. Improving access to non-government standards is being drafted into the new version of Directive DOE O 251.1 which is scheduled to be issued as a DRAFT for comment in RevCom.

The challenges facing the QMO in FY11 are:

- Improvement of implementation and understanding of the institutional management system assessment planning.
- Development of a process for analysis and roll-up of institutional and organizational assessment results to inform management.
- Improvement of implementation of the Risk Priority Model (RPM) for issues management. The RPM Committee needs to increase it's effectiveness in assigning Risk Significance Levels to institutional assessment issues, and in consolidation and potentially reducing the number of corrective actions from common issues.

It is expected that once the initiatives of the Contractor Assurance/Performance Management WBS 5.0 of the Blueprint Project are finalized, the vulnerabilities will be reduced.

In FY11 the QMO will be reviewing the following SBMS documents:

- Quality Management System Description
- Quality Assurance Program Description
- Lessons Learned Subject Area
- Inspections and Acceptance Subject Area
- Document Control Subject Area

Fiscal Year Objectives and Performance Targets

Aligned with Strategic Focus Area: OPERATIONAL EXCELLENCE

Driver	Objective	Activity	Owner	Supporter
QMO Goal 1: Provide qua	lity tools and processes for co	ntinuous improvement of systems and progr	rams.	
ALP, QMO Goal ALP, Blueprint, QMO	Implement Human Performance Improvement Initiative Implement Competitiveness Improvement Initiative	 Development of "science message" Support BNL ESH on high reliability organizing corporate initiative Monitor further revision of ESR re: incorporation of human performance Engage HPAs, other leverage points in ongoing conversation Enable supervisors to include HP perspective as part of observations Support EFCOG HPI effort Provide facilitation support (QMO staff) to the pay CIP Teams 	W. Brown S. Scocca	J. Labas J. Labas S. Kessler
Goal	Improvement Initiative	 staff) to the new CIP Teams CIP Team documentation/templates Conduct a CIP "communication blitz" to promote the successes of the pilot teams, Green Belt Training, and the status of the new teams, including communication/education for supervisors/middle managers Finalize the annual CIP Cycle and document it in a BNL Program Description 		S. Kessler

Driver	Objective	Activity	Owner	Supporter
		 Establish the CIP Office and communicate its purpose and services provided to the Lab community Explore ideas for using the CIP Team process maps Increase institutional capacity to support CIP Teams formed in FY 2012 (i.e., from 3 to 6) Prepare and distribute annual CI Program Report Lessons Learned for CI team leaders, members and for program improvements (CI Program report) 		
QMO Goal	Post the BNL "HDI" model on the SBMS website	 Create & post the initial HDI workflow model Support Communities of Practice Develop additional workflows as required in support of BNL's CIP 	J. Canestro	T. Morrison N. Puglin S. Kessler N. Nair
QMO Goal	Manage the SBMS Improvement Project to improve implementation of the system	 Prioritize enhancements Monitor and evaluate metrics Create new cycle time metrics Create customer satisfaction survey Using survey results, engage customers/end users to evaluate & streamline development process Automate Document Approval Form Pilot a new and different way to format management system descriptions Based on feedback, re-design SBMS homepage 	J. Canestro S. Kessler	SBMS Staff C. Patterson G. Flete S. Kessler N. Puglin

QMO Goal 2: Provide a comprehensive and rigorous assurance system that ensures compliance with applicable requirements, pursues excellence through continuous improvement, provides for timely identification and correction of deficient conditions, and verifies the effectiveness of completed corrective actions.

ALP, Blueprint, PEMP, QMO Goal	Improve MS Steward accountability in monitoring/assessing and improving key functions and processes integral to the CAS; Implement corrective actions for the Integrated Assessment Program; • Demonstrate a strengthened independent assessment function through more effective integration of Quality Assurance, Internal Audit, Internal Oversight, and Integrated Assessments in support of a successful contractor assurance program {PEMP Notable Outcome}	•	Working with the DDO, in support of the IRMC, QMO assigned a new role of the Assessment Manager Develop the Integrated Assessment Plan as input to the ALP and the webbased "Assessment Scheduler" Summarize required assessments planned by Management System Owners (MSOs) and coordinate its distribution, review and comment resolution Enhance the guidance for MSOs in order to improve consistency and implementation of the MS risk analysis, assessment and metric planning, and change control and the assessment plan in accordance with the IRMC Charter. Improved partnering with BHSO on institutional assessment planning Implementation of roll-up and analysis of assessment results Improved implementation of the RPM for issues management and corrective action management	T. Baker	N. Nair
ALP, Blueprint, QMO Goal	Improve Corrective and Preventive Action Management with strengthened QMR and	•	Improve institutional capability for effective corrective action (CA) development and management Improve effectiveness of CAs through	J. Labas	E. Sierra J. Wilke M. Nair

ALP, Blueprint, PEMP, QMO Goal	Event/Issues analysis capabilities and reporting Develop processes for institutional and organizational performance roll-up, analysis and	 analysis, recommendations and reporting Improve institutional capability for effective preventive action (PA) development and management (through reinvigorating HPI) Improve management of CA's: tracking, closure and reporting Establish (lower-level) event analysis working group to reduce rate of events (statistically significant trend/shift demonstrated) 	J. Labas	
	reporting; Deliver training on tracking and trending leading and lagging indicators; • Evaluate low level ESH events and issues to identify trends and disseminate Lessons Learned {PEMP Notable Outcome}			
ALP, Blueprint, PEMP, CAS	Make significant progress in defining and implementing a CAS; Have a successful CAS Peer Review; Develop improvement actions in response to the CAS Peer Review {PEMP Notable Outcome – Same}	 Finalize CAS Program Description Support DDO and Senior Management in preparation for the CAS Peer Review Orchestrate CAS Peer Review Support DDO and Senior Management in responding to CAS Peer Review Factual Accuracy Report Facilitate CAS Effectiveness Review and development of actions 	J. Wilke	T. Baker

QMO Goal 3: Provide the primary stewardship responsibilities for the following management systems/programs:

- o Integrated Assessment Program Management System
- **Output** Output
 Out
- Standards Based Management System
- **O BNL Lessons Learned Program**
- Occurrence Reporting and Processing System
- **Quality Assurance Program**
- o Suspect/Counterfeit Items Program

QAP/IAP/IP	Deliver functions, processes and products corresponding with responsibilities.	 Update IAP with CAS and IRMC Coordinate preparation of Annual Assessment Plan (AAP) for review Prepare Required Line Assessment Table after approval of AAP Monitor IAP Metrics Monthly Monitor QAP Metrics Quarterly Monitor SBMS Metrics Quarterly Prepare FY11 Year-end Report (PEMP) Develop FY12 PEMP Prepare FY11 PEMP Period Performance Summaries Prepare FY11 and FY12 Annual Laboratory Plan Develop and track ATS status reports to be used by senior management 	T. Baker T. Baker T. Baker T. Baker J. Labas J. Canestro T. Baker T. Baker T. Baker N. Nair	N. Nair N. Nair N. Nair G. Flete J. Fortunato G. Flete J. Fortunato
		 Participate in Integrated Performance Management Community of Practice based on agenda and working groups 	All	All

SBMS	Deliver functions, processes and products corresponding with responsibilities.	 Coordinate/Conduct FY11 Annual Review of Operations MSDs for DDO Participate in SBMS Managers Group Participate in Management System Deployment Community of Practice Support RM software changes & enhancements Create HDI-like process Create, prepare and distribute periodic status report on QMO support for SHSD 	J. Canestro J. Canestro R. Lebel J. Canestro J. Canestro J. Canestro	J. Wilke/B. Brown C. Patterson G. Flete T. Morrison QMO
QA Program/QMS	Deliver functions, processes and products corresponding with responsibilities.	 Provide support for investigations and CA Use E/I Assessment Checklist for the institution Annual Lessons Learned Coordinators workshop to prompt feedback, evaluate, and improve the BNL Lessons Learned Program Include HPAs in notification of Events 	All E. Sierra E. Sierra E. Sierra	
QMO Goal 4: Provide QMO responsibilities.	O Personnel who possess exp	erience, knowledge, skills, and abilities com	mensurate wit	h their
QMO Goal	Provide continuing training and professional development	 QMO Staff examples: HPI Training Lean Six Sigma Training Tap Root Training Sharepoint Training Track involvement of training 	R. Lebel All	

QMO Goal	Supplement individual experience and provide a means to maintain awareness of changes and advances in the various fields of expertise	 Institutional examples: Causal Analysis Training Quality Assurance Reps. Training Project Management Training DOE BHSO and Germantown interface Participate in EFCOG and rewrite teams Battelle Integrated Performance Management Community of Practice (CoP) Battelle MS Deployment CoP SBMS Managers Meeting Each QMO staff member participates/attends at least 2 diversity activities during the year Host a person with a disability for work experience Host a Summer Student 	R. Lebel All	
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